

Portland Harbor Superfund Site
Portland, Oregon

Background

The Portland Harbor Superfund Site, at its maximum extent prior to Site boundaries being determined, encompasses approximately a 30-mile stretch of the Willamette River, from Willamette Falls to the confluence of the Willamette and Columbia Rivers. The Site gets its name from a six-mile stretch of the Willamette River that is heavily industrialized on both banks immediately north-west of the Portland downtown business district. The RI/FS AOC/SOW for the Portland Harbor Superfund Site defines an Initial Study Area (ISA), which is the entire six-mile industrial area, but the AOC/SOW also requires work to be performed outside the ISA to determine what the boundaries of the Site actually are. A federal navigation channel maintained by the U.S. Army Corps of Engineers (USACE) exists throughout the six-mile ISA and extends three miles north-west to the confluence with the Columbia River and several miles south-east of the ISA; south-east of Portland, where industrial activity is relatively limited. The approximately 20-miles of Willamette River between downtown Portland and Willamette Falls is primarily used for agriculture and dotted with small communities, and the River remains unindustrialized to Willamette Falls where the USACE Willamette Falls Locks are located, as well as some industrial operations that may have contributed hazardous substances to the ISA. Sediments in the ISA are contaminated with PCBs, PAHs, inorganics, organotins, pesticides, solvents, dioxins, and pentachlorophenol. In order to address the long-term threat to the human food chain and sensitive environments in the river, EPA listed the Site on the National Priorities List in December 2000.

The shoreline along the majority of the ISA has been developed for industrial and commercial purposes. This reach of the river is the receiving water body for discharges from numerous storm drains, combined sewer overflows (CSOs), and other outfalls. Historical or current commercial and industrial operations include cargo handling and storage; marine construction; boat manufacturing; marina operations; paper and metals fabrication; natural gas processing; wood treating; chemical manufacturing; bulk fuel storage and distribution; and refining. Contaminants may have entered the river via several transport mechanisms, including spillage during product shipping and handling, direct disposal or discharge, contaminated groundwater discharge, surface water runoff, storm water discharge, and contaminated soil erosion.

The entire Willamette River, including the ISA, is fished for recreational, commercial, and subsistence purposes. The Willamette River is part of the usual and accustomed fishing grounds for the Warm Springs, Nez Perce, Siletz, Umatilla, Yakama and Grand Ronde Indian tribes. Pacific Lamprey caught in the Willamette River are used for subsistence and cultural purposes by the Tribes. The Cathedral Park residential neighborhood also borders the ISA, and is an access point for several ethnically diverse neighborhoods in Portland that use the Willamette River for recreational and subsistence purposes.

The ISA as a migratory route and nursery for several species of Pacific salmon. Lower Columbia River Chinook Salmon, Upper Willamette River Chinook Salmon, Lower Columbia River Steelhead, and Upper Willamette River Steelhead are listed species.

Lower Columbia River/Southwest Washington Coho Salmon is a candidate species, and Southwestern Washington/Columbia River Coastal Cutthroat Trout is proposed for listing. The federally listed threatened Bald Eagle also has nesting locations along the Willamette River.

EPA completed the "Portland Harbor Sediment Investigation Report" in May 1998, which was used to support the NPL listing. In total, 227 samples were collected as follows: 158 surface sediment (<10cm), 30 sediment porewater, and 39 subsurface cores (1.8 ft to 4.6 ft). These samples confirmed the presence of elevated hazardous substances as summarized above. Numerous other investigations primarily by Potentially Responsible Parties in the Willamette's upland riparian area, have documented releases of hazardous substances currently found in sediment. These investigations have been completed, and many more are on-going under the direction of the Oregon Department of Environmental Quality (DEQ). A Memorandum of Understanding (MOU) signed by EPA, DEQ, six Tribes, NOAA and several other natural resource trustees designates EPA as lead for in-water work and DEQ as lead for upland work at the Site.

Nine PRPs signed the RI/FS AOC/SOW, which became effective September 28, 2001. Several of these PRPs have indicated a desire to perform "early actions" outside the scope of the RI/FS, which is allowed under the terms of the AOC/SOW. Criteria for identifying and prioritizing potential early action areas in the ISA will be developed as part of the RI/FS, and areas in the ISA where remedial activities that make sense prior to a ROD will also be identified. Early Actions will then be implemented under separate orders and agreements as determined by EPA to be appropriate, necessary, and consistent with overall RI/FS activities at the Site.

Project Status/Next Steps

After completing the AOC/SOW agreement on September 28, 2001, the next major milestone is development of a draft RI/FS work plan by the PRPs by April 2002. In the meantime, EPA is meeting weekly with its entire project team (EPA, DEQ, six Tribes, NOAA, NMFS, USF&WS, others) and monthly with the PRPs to ensure the draft RI/FS work plan submitted in April will be close to being approvable by EPA.

The RI/FS AOC/SOW includes a provision that some RI/FS tasks may be completed by USACE using funds authorized under the Water Resources Development Act (WRDA), provided EPA and USACE can enter into an agreement ensuring the work is completed in accordance with the NCP and on a schedule determined by EPA during approval of the RI/FS work plan. EPA, USACE, and DEQ are close to completing this agreement, which will allow the PRPs and USACE to collaborate on potential overlapping RI/FS and WRDA tasks. However, the AOC/SOW clearly articulates that the PRPS will retain responsibility for all RI/FS work plan deliverables and CERCLA compliance.